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# Notice of Allowability

Application No.

09/653,154

Examiner

Jungwon Chang

Applicant(s)

SUGAHARA ET AL.

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to supplemental amendment filed on 5/24/2004.
2. ☒ The allowed claim(s) is/are 1-15.
3. ☒ The drawings filed on 31 August 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100  
JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
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**Examiner's Amendment**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Jae Won Song on 6/15/04.

3. The application has been amended as follows:

In specification

Page 1, after the title of the invention and before the "Background of the Invention" section, enter a new section as follows:

Related Applications

The present application relates to the subject matter of co-pending U.S. Application Serial No. 09/778,649, filed by Jeffrey D. Larson, et al. on February 5, 2001, now Pat. No. 6,678,758.

In claims

Claim 1 (Currently Amended) A method for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides

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service and a plurality of initiator nodes which request service from said target node, said method comprising the operations of:

when a first request is received from said initiator node during a period that said target node is unable to provide service, returning a first reject reply by attaching thereto reject time information that matches said period;

when said target node is in a state capable of providing service, preferentially accepting a retry request carrying older reject time information; and

at said target node staying in the state capable of providing service, when the retry request is received, processing said retry request while when a first second request is received, returning a second reject reply by attaching thereto new reject time information.

Claim 5 (Currently Amended) A method carried out at an initiator node for avoiding starvation at said initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said method comprising the operations of:

(a) sending a first request to said target node during a period that said target node is unable to provide service; and

(b) when a reject reply is received from the target node in response to said first request, sending a retry request by attaching thereto a parameter whose value is equal to the value of a parameter of reject time information attached to said reject reply.

Claim 6 (Currently Amended) An apparatus for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said apparatus comprising:

means for, when a first request is received from said initiator node during a period that said target node is unable to provide service, returning a first reject reply by attaching thereto reject time information that matches said period;

means for, when said target node is in a state capable of providing service, preferentially accepting a retry request carrying older reject time information; and

means for, at said target node staying in the state capable of providing service, when the retry request is received, processing said retry request while when a first second request is received, returning a second reject reply by attaching thereto new reject time information.

Claim 10 (Currently Amended) An apparatus provided at an initiator node for avoiding starvation at said initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said apparatus comprising:

means for sending a first request to said target node during a period that said target node is unable to provide service; and

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means for, when a reject reply is received from the target node in response to said first request, sending a retry request by attaching thereto a parameter whose value is equal to the value of a parameter of reject time information attached to said reject reply.

Claim 11 (Currently Amended) A recording medium readable by an apparatus for avoiding starvation at an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said recording medium having stored thereon a program for implementing:

a facility for, when a first request is received from said initiator node during a period that said target node is unable to provide service, returning a first reject reply by attaching thereto reject time information that matches said period;

a facility for, when said target node is in a state capable of providing service, preferentially accepting a retry request carrying older reject time information; and

a facility for, at said target node staying in the state capable of providing service, when the retry request is received, processing said retry request while when a first second request is received, returning a second reject reply by attaching thereto new reject time information.

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Claim 15 (Currently Amended) A recording medium readable by an initiator node in a computer network to which are connected at least one target node which provides service and a plurality of initiator nodes which request service from said target node, said recording medium having stored thereon a starvation avoiding program for implementing:

a facility for sending a first request to said target node during a period that said target node is unable to provide service; and

a facility for, when a reject reply is received from the target node in response to said first request, sending a retry request by attaching thereto a parameter whose value is equal to the value of a parameter of reject time information attached to said reject reply.

#### REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance: The claimed invention provides the novel use of rejection time information to avoid starvation in a computer network. When a target node is in a state unable to provide service for a request received from an initiator node, the target node transmits a rejection reply by attaching the rejection time information to the rejection reply. When the target node is in a state capable of providing service, preferentially accepting a retry request carrying

older rejection time information, results in an increase in communication traffic, which were not taught or suggested by the prior art of record.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jungwon Chang whose telephone number is (703)305-9669. The examiner can normally be reached on 9:30-6:00 (Monday-Friday).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John A Follansbee can be reached on (703)305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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older rejection time information, results in an increase in communication traffic, which were not taught or suggested by the prior art of record.

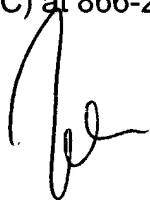
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JWC  
June 15, 2004



JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

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